DOCUMENT RESUME

ED 214 215 CS 503 782

AUTHOR Pearson, Judy C.; Turner, Lynn H.
TITLE The Relationship between Psychological Sex Type and Communication Apprehension.
PUB DATE Feb 82
NOTE 29p.; Paper presented at the Annual Meeting of the Western Speech Communication Association (Denver, CO, February 19-23, 1982).

EDRS PRICE MF01/PC02 Plus Postage.
DESCRIPTORS Anxiety; College Students; *Communication Problems; *Communication Research; Correlation; Higher Education; Inhibition; *Psychological Patterns; Self Evaluation (Individuals); Sex Differences; *Sex Role
IDENTIFIERS *Communication Apprehension

ABSTRACT

A study examined the relationship between self-reported communication apprehension and psychological sex type as measured by the Bem Sex Role Inventory (BSRI). The BSRI identifies people as masculine (high in masculinity, low in feminity), feminine (high in femininity, low in masculinity), androgynous (high in both femininity and masculinity), and undifferentiated (low in both femininity and masculinity). Subjects were 232 college students who completed the self report measures. Regression analyses of the data illustrated the usefulness of replacing the four-part matrix classification of the BSRI with other factors that emerge from the instrument. As hypothesized, leadership and incisiveness were factors demonstrated to have an inverse relationship to communication apprehension. On the other hand, there was no apparent relationship demonstrated between communication apprehension and self-reported masculinity/femininity, empathy, diplomacy, or biological sex. (RL)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED214215

U.S. DEPARTMENT OF EDUCATION
NATIONAL INSTITUTE OF EDUCATION
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)
X This document has been reproduced as received from the person or organization originating it.
☐ Minor changes have been made to improve reproduction quality.
• Points of view or opinions stated in this document do not necessarily represent official NIE position or policy.

THE RELATIONSHIP BETWEEN PSYCHOLOGICAL SEX TYPE AND COMMUNICATION APPREHENSION

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY
Judy C. Pearson
Lynn H. Turner
TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

Judy C. Pearson
School of Interpersonal Communication
Ohio University
Athens, Ohio 45701

Lynn H. Turner
Department of Speech
Iowa State University
Ames, Iowa 50011

CS503782

Ms. Pearson (Ph. D., Indiana University, 1975) is Associate Professor of Interpersonal Communication at Ohio University. Ms. Turner (M. A., University of Iowa, 1975) is Instructor of Speech at Iowa State University.

THE RELATIONSHIP BETWEEN PSYCHOLOGICAL SEX TYPE AND COMMUNICATION APPREHENSION

Communication apprehension, and its related constructs, including stage fright (Gilkinson, 1942; Clevenger, 1959); reticence (Phillips, 1968, 1980); unwillingness to communicate (Burgoon, 1976); shyness (Zimbardo, 1977); predispositions toward verbal behavior (Mortensen, Arntson, & Lustig, 1977); and audience anxiety (Buss, 1980) have been of concern to communication researchers for over four decades. Early research concentrated on stage fright, a construct focused on the anxiety associated with public communication. Phillips (1968) and McCroskey (1970) expanded this notion by developing the constructs of reticence and communication apprehension, which encompassed additional communication situations. If a judgment is determined on the basis of the quantity of research that has been completed, communication apprehension appears to be the most useful of these related concepts.

Communication apprehension refers to the anxiety or fear an individual associates with real or anticipated oral communication. High communication apprehension appears to impact negatively on many essential aspects of individuals' lives. Communication apprehension reduces an applicant's desirability and limits occupational choices (Daly & McCroskey, 1975). Persons with high communication apprehension are offered fewer personnel interviews (Daly & Leth, 1976), are viewed more negatively in the interviews in which they do participate (Daly & Leth, 1976; Richmond, 1977), and are more likely to be dissatisfied

in their employment (Falcione, McCroskey, & Daly, 1977). High communication apprehensives rate lower in self-reports of self-esteem (McCroskey, Daly, Richmond & Falcione, 1977; McCroskey, Daly & Sorenson, 1976), are evaluated lower in interpersonal attractiveness (McCroskey, Daly, Richmond, & Cox, 1975), are perceived more negatively by peers (McCroskey & Richmond, 1976), and are judged less effective as communicators by the receiver (Freimuth, 1976). McCroskey (1976) demonstrated that high communication apprehensives will have less influence on their peers regardless of the quality of their ideas, due in large part to their nonverbal behaviors which guide them to engage in fewer interactions than their less anxious counterparts. The inevitable conclusion supported by the bulk of this research is that communication apprehension has a deleterious effect on an individual's ability to succeed in most areas of life.

In general, research has demonstrated that women report more communication apprehension than do men (cf., Gilkinson, 1942; Clevenger, 1959; Bruskin, 1973; Porter, 1974; Feldman & Berger, 1974). However, most of the published studies which rely on the Persona Report of Communication Apprehension (PRCA) do not include separate means for men and women; thus they do not offer information on sex differences in communication apprehension.

The proliferation of communication apprehension research in the 1970's was matched by the research on psychological sex type in the field of psychology. Consequently, the

conceptualization and measurement of sex type underwent radical changes (Bem, 1974, 1976; Block, 1973; Constantinople, 1973; Kaplan & Bean, 1976; Pleck, 1975; Spence, Helmreich, & Stapp, 1975; Heilbrun, 1976; Berzins, Welling, & Wetter, 1978). Investigators called into question the traditional assumption that masculinity and femininity represent a single bipolar dimension of personality. These researchers have attempted to demonstrate the conceptual advantages of assuming independent development of masculinity and femininity. Most important among these advantages is the possibility that persons may develop more masculine and feminine attributes, i. e., psychological androgyny.

Interest in psychological androgyny spawned numerous instruments which purport to measure it (Bem, 1974; Berzins, Welling, & Wetter, 1978; Heilbrun, 1976; Spence, Helmreich, & Stapp, 1975) and a flood of studies demonstrating relationships between androgyny and other variables (cf., Bem, 1975, 1976; Baggio & Neilson, 1976; Deutsch & Gilbert, 1976; Montgomery & Burgoon, 1977; Wiggins & Holzmuller, 1978). Conceptual and behavioral validation have not always kept pace and have resulted in mixed findings (Bem, 1975, 1976, 1977; Bem & Lenney, 1976).

Some evidence suggests that the newly defined sex roles have implications for communication research. Observer ratings of subjects' verbal and nonverbal responsiveness demonstrates that androgynous and feminine-typed persons are significantly more responsive than are masculine-typed persons (Bem, Martyna,

& Watson, 1976). Androgynous persons have been shown to be more assertive in their communication behavior (Kelly, O'Brien, Hosford, & Kinsinger, 1976). Androgyny has also been linked to greater adaptability of language across situations (Eman, 1977) and greater adaptability in touching behavior (Eman, Dierks-Stewart, & Tucker, 1978). Androgynous individuals display "masculine" independence and assertiveness when situationally appropriate and display "feminine" helpfulness, warmth, playfulness and concern when given the opportunity (Bem, 1975). Sex role appears to be an intervening variable in self-disclosure behavior (Greenblatt, Hasenauer, & Freimuth, 1980; Pearson, 1980d), in rhetorical sensitivity (Pearson, 1981b), in persuasion (Montgomery & Burgoon, 1977, 1980), and in the criticism of classroom speeches (Pearson, 1980b, 1981a).

While earlier conceptions of masculinity and femininity suggested that masculinity represented psychological health in men and femininity was associated with psychological health for women, some empirical validation now recommends androgyny as a desirable sex role outcome for both sexes (Bem, 1974, 1975, 1976; Heilbrun, 1968; Spence, Helmreich, & Stapp, 1975). The perspective of a great deal of research on androgyny, including that in communication, is that androgynous individuals excel because they are presumably more flexible and adaptive. To view androgyny from this perspective slips the concept into the same kind of evaluative framework that it replaced. Originally androgyny served the useful purpose of allowing individuals to be more complex than permitted by the masculine or feminine

dichotomy. Viewing persons as composites of traits replaced this "either-or" perspective. The current tendency to pit androgynous subjects competitively against other sex types simply produces another research melodrama with a slightly different cast of characters.

Furthermore, androgynous persons are not superior in all respects. Androgynous and masculine-typed individuals frequently do not differ significantly from each other, but feminine-typed and undifferentiated persons tend to perform more poorly. For instance, high self-esteem is related mainly to the presence of masculine-typed capabilities and minimally to the presence of feminine-typed characteristics (Kelly & Worell, 1977). In addition, more stereotypically masculine traits than feminine traits were rated as socially desirable by college students (Rosenkrantz, Vogel, Bee, Broverman, & Broverman, 1968). Even on some tasks that were designed to generate stereotypically feminine expressiveness and affection, feminine-typed persons did not perform well (Bem, 1975; Bem, Martyna, & Watson, 1976).

A number of explanations have been offered for the seeming superiority of androgyny and masculinity as contrasted with feminine and undifferentiated groups. Females who are high in femininity and low in masculinity may not only be inhibited in behaving instrumentally but expressively as well (Bem, 1975). In other words, the absence of masculinity may represent a behavioral deficit.

A social desirability bias may account for the androgyny/masculinity preference. Feminine-typed women may endorse feminine characteristics because they are expected to respond in this manner, but these characteristics may not really indicate their dominant response dispositions (Kelly & Worell, 1977). When they are placed in situations that call for nurturance, for instance, they do not behave in this manner because the behavior has low probability for them.

Finally, a hypothesis of differential social utility has been offered. Feminine-typed expressive behaviors may be less socially effective for a person than are masculine-typed behaviors; consequently, they simply do not lead to positive outcomes as frequently. The superiority of androgyny, following this reasoning, results from the large number of masculine traits that are endorsed, not because the individual is endorsing both masculine and feminine traits.

A final problem with studies on androgyny is the psychometric adequacy of the instruments used to measure the construct. Analyses of the factor structure of the Bem Sex Role Inventory, the Personal Attributes Questionnaire, and Heilbrun's Masculinity and Femininity Scales (cf., Gaudreau, 1977; Gross, Batlis, Small, & Erdwins, 1979; Pearson, 1980a) have yielded a variety of different solutions. The emergence of more than two factors in most of these studies suggests a more complex situation than that invited by the masculine-femine dichotomy and calls into question the psychometric adequacy of the instruments.

Indeed, one researcher concluded that the three most widely used sex role instruments were not psychometrically adequate, that sex roles appear to be multidimensional, and that future research might profit from using the independent factors that have emerged rather than a single androgyny score (Pearson, 1980c).

In the same way that researchers have found that using psychological sex type rather than biological gender adds greater sensitivity to their predictions, the replacement of single androgyny scores with scores on independent factors of sex type should add precision to our understanding of the relationship between communication variables and psychological sex type. Recently, Greenblatt, Hasenauer, and Freimuth (1980) substituted psychological sex type for biological gender in an examination of communication apprehension. They found that feminine females were more apprehensive than masculine males, as expected; and androgynous males and androgynous females did not differ significantly from each other, as expected; and androgynous females were less anxious than feminine females, also as expected. However, contrary to their final hypothesis, androgynous males did not significantly differ from masculine males. Overall, this study illustrates the greater sensitivity of psychological sex type rather than biological gender; however, it does not allow us to dismiss the idea that the masculinity component, rather than the androgyny component, is responsible for the differences in reported communication apprehension. In other words, feminine females may be more apprehensive than

masculine males and than androgynous females because of their absence of masculinity which represents a behavioral deficit. Similarly androgynous males and females do not differ from each other nor do androgynous males differ from masculine males because each of these groups includes an endorsement of masculine personality traits. Masculinity, rather than androgyny, appears to be a superior predictor of communication apprehension.

The usefulness of research relating communication variables to psychological sex type does not appear to lie in those studies which routinely relate individual variables with the blunt four-part classsification schema of feminine, masculine, androgynous, and undifferentiated provided by the well-known instruments. Our understanding of the impact of sex role on communication behaviors may be extended as we abandon our reliance on rigid classificatory schema and as we develop more creative methods of analysis. In this study we will attempt to generate more information about the relationship between reported communication apprehension and five factors that have emerged from the Bem Sex Role Inventory. These five factors are empathy, leadership, incisiveness, diplomacy, and self-reported masculinity/femininity (Pearson, 1980a). Previous research allows us to draw three hypotheses and ask two research questions.

H_1: Individuals who report high communication apprehension will score low on leadership.

The factor of <u>leadership</u> appeared to include both social and task personality characteristics that typify competent

leadership in the previous factor analytic study of the Bem Sex Role Inventory. The factor was identified by such items as adaptable, acts as a leader, ambitious, assertive, and cheerful. Individuals who are high in communication apprehension are viewed as less desirable as potential opinion leaders (Hurt & Joseph, 1975; Hurt, Preiss, & Davis, 1976; McCroskey & Richmond, 1976) and they report that others turn to them less for opinion leadership (Witteman, 1976). High communication apprehensives have less influence on their peers, regardless of the quality of their ideas (McCroskey, 1976). A negative correlation exists between communication apprehension and personality characteristics including adventurousness, dominance, confidence, and the need to achieve, all of which seem relevant to leadership (McCroskey, Daly, & Sorenson, 1976). In the small group setting, high communication apprehensives talk less (Hamilton, 1972; Sorenson & McCroskey, 1977; Weiner, 1973; Wells, 1970; Fenton & Hopf, 1976), do not sit in positions of leadership or influence (Weiner, 1973), and demonstrate less leadership behavior (Wenzlaff, 1972; Fenton & Hopf, 1976). High communication apprehensives prefer occupations that require less communication (Daly & McCroskey, 1975) and prefer college classes in which fewer communication opportunities are likely (Pearson & Yoder, 1980; McCroskey, 1978).

H_2: Individuals who report high communication apprehension will score low on incisiveness.

The factor of <u>incisiveness</u> was defined in the previous sex role study as someone who systematically determines an

answer and then defends it. The factor included items such as hard-headed and analytical. Incisiveness may be further defined as someone who is penetrating, acute, and has the power to impress the mind by directness and decisiveness. The hypothesized relationship between reported communication apprehension and incisiveness is drawn on the basis of a number of pieces of related research. Individuals who are high in communication apprehension are perceived to be less effective as communicators (Freimuth, 1976) and they use significantly more rhetorical interrogatives such as "You know?" "You understand?" and "Alright?" (Powers, 1977). While high communication apprehensives tend to talk less than others, when they do speak, they often add comments that are non sequitors or are irrelevant to the discussion at hand (Weiner, 1973; Wells, 1970). High communication apprehensives have less influence on their peers (McCroskey, 1976) and are more anxious than are others (McCroskey, Daly, & Sorenson, 1976). An inverse relationship exists between communication apprehension and assertiveness (Pearson, 1979; Knutson & Lashbrook, 1976) which is relevant to incisiveness as assertivess is characterized by persons who are risk takers, fast to take action, competitive, take-charge, and directive.

H_3: Individuals who report high communication apprehension will score low on masculinity.

This hypothesis is framed as a result of the studies which have focused on biological gender (Cf., Gilkinson, 1942; Clevenger,

1959; Bruskin, 1973; Porter, 1974; Feldman & Berger, 1974) as well as the more recent study which suggests that femininity is associated with higher communication apprehension while masculinity is associated with lower communication apprehension (Greenblatt, Hasenauer, & Freimuth, 1980).

R_1: Is there a relationship between reported communication apprehension and empathy?

Previous research does not allow us to hypothesize a relationship between communication and empathy. High communication apprehensives may be more empathic than individuals who are more skilled at sending skills; on the other hand, they may be more dysfunctional in both sending and receiving skills. Research which has focused on the relationship between communication apprehension, as measured by the PRCA, and writing apprehension, for instance, has demonstrated only a moderate correlation (McCroskey, 1970, 1977) and between communication apprehension and apprehension about singing has shown low correlations (Andersen, Andersen, & Garrison, 1978). It is thus difficult to posit any clear relationship between sending and receiving communication skills when minimal relationships exist among various sending, or initiating, skills. In addition, no significant relationship has been demonstrated between communication apprehension and sensitivity (McCroskey, Daly, & Sorenson, 1976), although high communication apprehensives have been shown to be low in responsiveness (Knutson & Lashbrook, 1976).

R_2: Is there a relationship between reported communication apprehension and diplomacy?

Again, the literature does not provide rationale for predicting a relationship between communication apprehension and diplomacy. While high communication apprehensives do not demonstrate savoir-faire, they may be less offensive than their more gregarious counterparts. The literature cited above which deals with sensitivity and responsiveness (McCroskey, Daly & Sorenson, 1976; Knutson & Lashbrook, 1976) does not allow clear predictions in the area of diplomacy.

METHOD

Data Collection

The subjects in this study were 232 students, 145 men and 87 women, enrolled in a basic public speaking course at a large midwestern university. Each subject completed the Bem Sex Role Inventory and the Personal Report of Communication Apprehension. To help control for order effects, half of the subjects completed the Bem Sex Role Inventory first and half of the subjects completed the Personal Report of Communication Apprehension first.

Measures

The Bem Sex Role Inventory is a self-report instrument which is based on the conception of the sex-typed person as one who has internalized the societal sex-standard of desirable behavior. The scale allows independent measurement of masculinity and femininity and can identify people as masculine (high in masculinity,

low in femininity), feminine (high in femininity, low in masculinity), androgynous (high in femininity and masculinity), or undifferentiated (low in femininity and masculinity). The self-report instrument requests reactions to 60 personality characteristics that are each placed on a 7-point scale. Twenty adjectives describe masculine personality characteristics, e.g., self-reliant, independent; 20 adjectives describe feminine personality characteristics, e.g., gentle, understanding; and 20 adjectives are undifferentiated, e.g., happy, conceited, and serve as fillers. Bem reports high internal consistency, discriminant validity, test-retest reliability, and convergent validity when compared to other measures of masculinity-femininity (Bem, 1974).

Researchers have used a variety of methods to categorize individuals into the four groups of masculine, feminine, androgynous, and undifferentiated including median splits, t-tests, summing the scores, and using the interaction between masculinity and femininity. Regardless of methodology, most of the research on sex roles which has employed the Bem has relied on a 2 X 2 conceptualization that dichotomizes masculinity into high and low conditions and similarly dichotomizes femininity into high and low conditions. However, the Bem provides continual data which permits the researcher to employ regression analysis. Pearson (1980b, 1981b) has demonstrated the usefulness of this alternative. In this study, regression analysis rather than analysis of variance or t-tests was used.

The Personal Report of Communication Apprehension measures an individual's apprehension about oral communication. The PRCA-College includes 20 items placed on five-point Likert-type scales. Reports of internal reliability have all exceeded .90 (cf., McCroskey, 1978). This measure was selected because of its well established predictive validity as well as its high reliability. The validitv of the instrument is examined in recent research report (McCroskey, 1978). Most of the previous research on communication apprehension has proceeded by comparing high and low apprehensives. As Powers and Smythe (1980) point out, the absence of data for those subjects whose level of apprehension might be labeled as average or "normal" is a great liability in being able to accurately assess the differences obtained. This study seeks to remedy that recurrent problem by dealing with all of the data through regression analysis. The continual nature of the data provided by the PRCA allows this method of analysis.

Data Analysis

The data were examined using regression analysis and the general linear models procedure from the Statistical Analysis System (SAS) which provides Type IV Sum of Squares, a conservative estimate of difference. The dependent variable in the analysis was the subjects' reported communication apprehension as determined by the PRCA. The independent variables were sex, leadership, incisiveness, masculinity/femininity, empathy, and diplomacy. The latter five independent variables were determined by totaling

the subjects' responses to the items which loaded on each of these factors in a previous study (Pearson, 1980a).

RESULTS

Hypothesis 1--Individuals who report high communication apprehension will score low on leadership--was supported ($F(1,225) = 14.25$; $p = .0002$).

Hypothesis 2--Individuals who report high communication apprehension will score low on incisiveness--was supported ($F(1,225) = 6.77$; $p = .0099$).

Hypothesis 3--Individuals who report high communication apprehension will score low on masculinity--was not supported ($F(1,225) = 2.50$; $p = .1151$).

Research Question 1--Is there a relationship between reported communication apprehension and empathy--was not found to be answered affirmatively or negatively. No significant difference was determined for this variable ($F(1,225) = 3.12$; $p = .0786$).

Research Question 2--Is there a relationship between reported communication apprehension and diplomacy--was not answered affirmatively or negatively. No significant difference was determined for this variable ($F(1,225) = 1.55$; $p = .2150$).

The sex of the subject was entered as an independent variable in this study, but no research questions concerned a relationship between sex and reported communication apprehension. Since this data was available, it was examined but no significant findings resulted ($F(1,225) = .52$; $p = .4728$).

DISCUSSION

Communication apprehension appears to be inversely related to leadership and incisiveness, as measured by the Bem Sex Role Inventory. Interestingly, the factor of incisiveness includes only items which were determined by Bem to represent masculinity; the factor of leadership includes only one item which was determined to represent femininity, with the bulk of the items representing masculinity. On the other hand, the factor empathic includes only feminine items; the factor diplomatic has items from both subscales; and masculinity/femininity includes primarily items that have been determined to be feminine. We might conclude, then, that masculinity appears to be a better predictor of the absence of communication apprehension than femininity is a predictor of the existence of communication apprehension. This study tends to offer support for the notion that the absence of masculinity represents a behavior deficit or that the presence of masculinity may represent an essential behavioral component.

More important, this study demonstrates that viewing psychological sex type as more complex than a four-part classification matrix holds important implications for communication research. The "law of the hammer," applied in many recent communication studies in which psychological sex types are simply inserted where biological gender existed previously, has limited value. In this study, communication apprehension was shown to be inversely related to incisiveness which includes such items as "defends

own beliefs" and "analytical;" and was shown to be inversely related to leadership which includes both social and task-related leadership qualities such as "acts as a leader," "adaptable," "ambitious," "cheerful," and "assertive." Empathy which includes stereotypically feminine items including "sympathetic," "sensitive to the needs of others," "tender," "gentle," and "warm" was not demonstrated to have a relationship with communication apprehension. Similarly, a person's self-report that they are masculine or feminine does not appear to have a relationship on their self-report of communication apprehension. Finally, being diplomatic which includes being "likable" and "tactful" was not demonstrated to have a relationship to self-reported communication apprehension. Our understanding of communication apprehension is advanced when we are able to further identify those components of psychological sex type which are related to this well-studied variable. This perspective may encourage additional avenues of research which might eventually allow us to understand sex-role development and the implications of the adaptive significance of sex-role behavior for the field of communication.

REFERENCES

Andersen, P. A., Andersen, J. F., & Garrison, J. P. Singing apprehension: The development of two constructs. Sign Language Studies, 1978, 19, 155-186.

Baggio, M. K., & Neilson, E. C. Anxiety correlates of sex-role identity. Journal of Clinical Psychology, 1976, 32, 619-623.

Bem, S. L. The measurement of psychological androgyny. Journal of Consulting and Clinical Psychology, 1974, 42, 155-162.

Bem, S. L. Probing the promise of androgyny. In A. G. Kaplan & J. P. Bean (Eds.), Beyond sex-role stereotypes. Boston: Little, Brown, 1976.

Bem, S. L. Sex-role adaptability: One consequence of psychological androgyny. Journal of Personality and Social Psychology, 1975, 31, 634-643.

Bem, S. L. On the utility of alternative procedures for assessing psychological androgyny. Journal of Consulting and Clinical Psychology, 1977, 45, 196-205.

Bem, S. L. & Lenney, E. Sex-typing and the avoidance of cross-sex behavior. Journal of Personality and Social Psychology, 1976, 33, 48-54.

Bem, S. L., Martyna, W. & Watson, C. Sex typing and androgyny further explorations of the expressive domain. Journal of Personality and Social Psychology, 1976, 34, 1016-1023.

Berzins, J. I., Welling, M. A. & Wetter, R. E. A new measure of psychological androgyny based on the personality research form. Journal of Consulting and Clinical Psychology, 1978, 46, 126-138.

Block, J. H. Conceptions of sex role: Some cross-cultural and longitudinal perspectives. American Psychologist, 1973, 28, 512-527.

Bruskin Associates. What are Americans afraid of? The Bruskin Report, 1973, no. 53.

Burgoon, Judee K. The unwillingness to communicate scale: Development and validation. Communication Monographs, 1976, 43, 60-69.

Buss, Arnold H. Self-Consciousness and Social Anxiety. San Francisco: W. H. Freeman, 1980.

Clevenger, T., Jr. A synthesis of experimental research in stage fright. Quarterly Journal of Speech, 1959, 45, 134-145.

Constantinople, A. Masculinity-femininity: An exception to a famous dictum? Psychological Bulletin, 1973, 80, 389-407.

Daly, J. A. & Leth, S. Communication apprehension and the personnel selection decision. Paper presented to the International Communication Association convention. Portland, Oregon, 1976.

Daly, J. A. & McCroskey, J. C. Occupational choice and desirability as a function of communication apprehension.

Journal of Counseling Psychology, 1975, 22, 309-313.

Deutsch, C. J. & Gilbert, L. A. Sex-role stereotypes: Effect on perceptions of self and others and personal adjustment. Journal of Counseling Psychology, 1976, 23, 373-379.

Eman, V. A. An exploratory investigation of the relationship of sexual identity and use of sexually identified language. Ph. D. dissertation, University of Nebraska, 1977.

Eman, V. A., Dierks-Stewart, K., & Tucker, R. K. Implications of sexual identity and sexually identified situations on nonverbal touch. Paper presented to the Speech Communication Association. Minneapolis, Minnesota, 1978.

Falcione, R. L., McCroskey, J.C., & Daly, J.A. Job satisfaction as a function of employees' communication apprehension, self-esteem, and perceptions of their immediate supervisor. In B. Ruben (Ed.), Communication Yearbook I, New Brunswick, N. J.: Transaction Books, 1977, 363-375.

Feldman, M. L., & Berger, C. R. Verbal dogmatism: Its explication, measurement, and relationship to interpersonal attraction. Paper presented to the Speech Communication Association convention. Chicago, Illinois, 1974.

Fenton, R. J., & Hopf, T. S. Some effects of communication inhibition on small groups: Participation, member satisfaction, perceived effectiveness, credibility, and leadership. Paper presented to the Speech Communication Association convention, San Francisco, 1976.

Freimuth, V.S. The effects of communication apprehension on communication effectiveness. Human Communication Research, 1976, 2, 289-298.

Gaudreau, P. Factor analyses of the Bem Sex-Role Inventory. Journal of Consulting and Clinical Psychology, 1977, 42, 155-162.

Gilkinson, H. Social fears as reported by students in college speech classes. Speech Monographs, 1942, 9, 141-160.

Greenblatt, L., Hasenauer, J. E. & Freimuth, V. S. Psychological sex type and androgyny in the study of communication variables: Self-disclosure and communication apprehension. Human Communication Research, 1980, 6, 117-129.

Gross, R., Batlis, N., Small, A., & Erdwins, C. Factor structure of the Bem Sex-Role Inventory and the Personal Attributes Questionnaire. Journal of Consulting and Clinical Psychology, 1979, 47, 1122-1124.

Hamilton, P. R. The effect of risk proneness on small group interaction, communication apprehension, and self-disclosure. M. S. thesis, Illinois State University, 1972.

Heilbrun, A. B. Measurement of masculine and feminine sex-role identities as independent dimensions. Journal of Consulting and Clinical Psychology, 1976, 44, 183-190.

Heilbrun, A. B. Sex role, instrumental-expressive behavior, and psycho-pathology in females. Journal of Abnormal Psychology, 1968, 73, 131-136.

Hurt, H. T. & Joseph, K. The impact of communication apprehension in the process of social change. Paper presented to the Eastern Communication Association convention, New York, 1975.

Hurt, H. T., Preiss, R., & Davis, B. The effects of communication apprehension of middle-school children on sociometric choice, affective, and cognitive learning. Paper presented to the International Communication Association convention, Portland, 1976.

Kaplan, A. G. & Bean, J. P. (Eds.) Beyond sex-role stereotypes. Boston: Little, Brown, 1976.

Kelly, J. A. & Worell, J. New formulations of sex roles and androgyny: A critical review. Journal of Consulting and Clinical Psychology, 1977, 45, 1101-1115.

Kelly, J. A., O'Brien, C. G., Hosford, R., & Kinsinger, E. Sex roles as social skills: A behavioral analysis of "masculinity," "Femininity," and "Psychological Androgyny." Paper presented to the Association for the Advancement of Behavior Therapy. New York, New York, 1976.

Knutson, P. K. & Lashbrook, W. B. Communication apprehension as an antecedent to social style. Paper presented to the Speech Communication Association convention, San Francisco, 1976.

McCroskey, J. C. The effects of communication apprehension on nonverbal behavior. Communication Quarterly, 1976, 24, 39-44.

McCroskey, J. C. Measures of communication-bound anxiety. Speech Monographs, 1970, 37, 269-277.

McCroskey, J. C. Oral communication apprehension: Reconceptualization and a new look at measurement. Paper

presented to the Central States Speech Association convention. Chicago, Illinois, 1981.

McCroskey, J. C. Oral communication apprehension: A summary of recent theory and research. Human Communication Research, 1977, 4, 78-96.

McCroskey, J. C. Validity of the PRCA as an index of oral communication apprehension. Communication Monographs, 1978, 45, 192-203.

McCroskey, J. C., Daly, J. A., Richmond, V. P., & Cox, B. G. The effects of communication apprehension on interpersonal attraction. Human Communication Research, 1975, 2, 51-65.

McCroskey, J. C., Daly, J. A., Richmond, V. P., & Falcione, R. L. Studies of the relationship between communication apprehension and self-esteem. Human Communication Research, 1977, 3, 269-277.

McCroskey, J. C., Daly, J. A., Sorenson, G. A. Personality correlates of communication apprehension. Human Communication Research, 1976, 2, 376-380.

McCroskey, J. C., & Richmond, V. P. The effects of communication apprehension on the perception of peers. Western Speech Communication Journal, 1976, 40, 14-21.

Montgomery, C. L. & Burgoon, M. The effects of androgyny and message expectations on resistance to persuasive communication. Communication Monographs, 1980, 47, 56-67.

Montgomery, C. L & Burgoon, M. An experimental study of the interactive effects of sex and androgyny on attitude change. Communication Monographs, 1977, 44, 130-135.

Mortensen, C. David, Arntson, Paul H., & Lustig, Myron. The measurement of verbal predispositions: Scale development and application. Human Communication Research, 1977, 3, 146-158.

Pearson, J. C. Evaluating classroom speeches: An investigation of speaker sex, sexism, and sex role identification. Paper presented to the International Communication Association convention. Minneapolis, Minnesota, May, 1981a.

Pearson, J. C. A factor analytic study of the items in the Rathus assertiveness schedule and the personal report of communication apprehension. Psychological Reports, 1979, 45, 491-497.

Pearson, J. C. A factor analytic study of the items in three selected sex-role instruments. Psychological Reports, 1980a, 47, 111-118.

Pearson, J. C. An investigation of the effects of evaluator sexism and sex role identification on the criticism of classroom speeches. Paper presented to the Speech Communication Association convention. New York, New York, November, 1980b.

Pearson, J. C. The psychometric adequacy of the Bem sex role inventory, the personal attributes questionnaire, and Heilbrun's masculinity and femininity scales. Paper presented to the Speech Communication Association convention. New York, New York, November 1980c.

Pearson, J. C. Sex roles and self-disclosure. Psychological Reports, 1980d, 47, 640.

Pearson, J. C. Sex, sex roles, and rhetorical sensitivity. Paper presented to the Western Speech Communication Association convention. San Jose, California, February, 1981b.

Pearson, J. C. & Yoder, D. D. Preferences and perceptions of the high communication apprehensive student toward public speaking and interpersonal communication. Iowa Journal of Speech Communication, 1980, 12, 16-24.

Phillips, G. M. On apples and onions: A reply to Page. Communication Education, 1980, 29, 105-108.

Phillips, G. M. Reticence: Pathology of the normal speaker. Speech Monographs, 1968, 35, 39-49.

Pleck, J. H. Masculinity-femininity: Current and alternative paradigms. Sex Roles, 1975, 1, 161-178.

Porter, D. T. Self-report scales of communication apprehension and autonomic arousal (Heart rate): A test of construct validity. Speech Monographs, 1974, 41, 267-276.

Powers, W. G. The rhetorical interrogative: Anxiety or control? Human Communication Research, 1977, 4, 44-47.

Powers, W. G. & Smythe, M. J. Communication apprehension and achievement in a performance-oriented basic communication course. Human Communication Research, 1980, 6, 146-152.

Richmond, V. P. Communication apprehension and success in the job applicant screening process. Paper presented

to the International Communication Association convention. Berlin, Germany, 1977.

Rosenkrantz, P., Vogel, S., Bee, H., Broverman, I., & Broverman, D. M. Sex-role stereotypes and self-concepts in college students. Journal of Consulting and Clinical Psychology, 1968, 32, 287-295.

Sorenson, G. & McCroskey, J. C. The prediction of interaction behavior in small groups: Zero history versus intact groups. Communication Monographs, 1977, 44,73-80.

Spence, J. T., Helmreich, R. & Stapp, J. Ratings of self and peers on sex-role attributes and their relation to self-esteem and conceptions of masculinity and femininity. Journal of Personality and Social Psychology, 1975, 32, 29-39.

Strahan, R. F. Remarks on Bem's measurement and a supplementary analysis. Journal of Consulting and Clinical Psychology, 1975, 43, 568-571.

Weiner, A. N. Machiavellianism as a predictor of group interaction and cohesion. M. A. thesis, West Virginia University, 1973.

Wells, J. A study of the effects of systematic desensitization on the communicative anxiety of individuals in small groups. M. A. thesis, San Jose State College, 1970.

Wenzlaff, V. J. The prediction of leadership: A consideration of selected communication variables. M. S. thesis, Illinois State University, 1972.

Wiggins, J. S. & Holzmuller, A. Psychological androgyny and interpersonal behavior. Journal of Consulting and Clinical Psychology, 1978, 46, 40-52.

Witteman, H. R. The relationship of communication apprehension to opinion leadership and innovativeness. M. A. thesis, West Virginia University, 1976.

Zimbardo, P.G. Shyness. Reading, Mass: Addison-Wesley, 1977.